AUTHOR INDEX

Volume 27, 1993

Abe, M., 1113
Abitbol, A. A., 1241
Abratt, R. P., 178
Aeppli, D., 899
Ahmad, N. R., 773, 765
Al-Sarraf, M., 1011
Alexander, III, E., 215
Allal, A., 59
Allam, A., 303
Amin, A. E., 323
Amols, H. I., 1121
Anantha, N., 1069
Anderson, L. L., 129, 1241
Ang, K. K., 1173
Arai, T., 811
Arias, F., 843
Arimoto, T., 1063
Asbell, S., 493
Azevedo, S. J., 553

Baas, P., 665
Bacigalupo, A., 1165
Baier, M., 855
Baker, S., 585
Baldini, L., 385
Balter, J. M., 137
Barker, E. A., 293
Barnes, P. D., 189
Barra, S., 1165
Barrett, A., 323
Behar, R. A., 485
Belkacemi, Y., 251
Bell, R., 1091
Ben-Arush, M., 231
Ben-Shahar, M., 231
Benson, M. C., 47
Berchuck, A., 1245
Beresford, B. A., 643
Bernier, J., 17
Berti, E., 385
Bezwoda, W. R., 1181
Bhat, S. B., 507
Biert, J., 1107
Biesta, J., 785
Bis, K. G., 791
Blasko, J. C., 1241
Blitzer, P. H., 507
Blivin, J., 1245
Bolla, M., 17
Bonomi, P., 739
Borema, P. L., 273
Bosch, W. R., 1199
Bosset, J.-F., 17
Bosworth, J. L., 849
Brabbins, D., 1215
Brada, M., 471
Brash, D. E., 575
Bree, R. L., 915
Breneman, J. C., 1001
Brennan, M. F., 259
Brito, C. S., 553
Brock, W. A., 1173
Brown, A. N. P., 331
Bruner, D. W., 825
Bruno, L. A., 553
Buchler, D. A., 963
Budach, V., 627
Buffa, A., 849
Bull, C. A., 959
Burger, P. C., 197
Burke, T. W., 817
Burman, C., 437
Burnison, C. M., 499
Byhardt, R. W., 493, 537, 753

Caccialanza, M., 385
Cadman, P., 1225
Cahill, S., 959
Calitchi, E., 251
Calkins, D. P., 891
Campbell, B. H., 1011
Campos, Z., 791
Cao, S., 1131
Caron, J.-L., 1225
Carter, D., 575
Cassady, J. R., 109, 855
Cassisi, N. J., 379, 1017
Castro, J. R., 75
Cataldo, I., 621
Catton, C. N., 11, 1091
Cetas, T. C., 109
Cha, S. S., 1153
Chadha, T. T., 507
Chaiken, L., 455
Chan, K. W., 109
Chandrahasa, T., 507
Chaney, E. L., 145
Chang, A. Y., 613
Chao, C. K. S., 1185
Chassagne, D., 1051
Chen, G. T. Y., 137
Chen, X.-G., 697
Cheng, A., 707, 1199
Cherlow, J. M., 1001
Chin, L. M., 419, 449
Chiu, M., 969
Choi, Y., 455
Clark, B. G., 803, 871, 1225
Clarke, D. H., 561
Clarke-Pearson, D., 1245
Cline, J. M., 891
Clyde, C., 117
Coderre, J. A., 1121
Coffin, C., 1193
Coghe, M., 945
Cohen, E. P., 93
Cohen, M. E., 197
Collin, G., 31
Comsia, N., 969
Corn, B. W., 825, 987
Corvò, R., 1165
Cosmatos, D., 207
Cotter, G. W., 531
Coucke, P. A., 17, 885
Court, B., 3
Cowan, K. H., 293
Cox, J. D., 493, 537
Cox, R. S., 331
Cox, W., 331
Crandon, A. J., 959
Crim, C., 677
Cromheecke, M., 1141
Crook, J., 31
Cullip, T. J., 145
Cummings, B. J., 173, 1091
Curran, Jr., W. J., 178
Cuttat, J.-F., 885

Dale, J., 231
D'Amico, A., 125
D'Angelo, T., 293
Daudt, A., 553
Davis, L. W., 235, 499
Davis, M. A., 659
DeBlasio, D. S., 849
de Jager-Nowak, H., 785
DeLaney, T. F., 671
del Carpio, R., 197
Delclos, L., 817
DelRowe, J., 207
Dempsey, W. H., 1147
De Neve, W., 945
Deore, S. M., 285
De Toma, D., 621
Devanna, W. G., 101
Dewhirst, M. W., 1245
Dinapoli, R., 1231
Dinshaw, K. A., 285
DiPetrillo, T., 545, 757
Doggett, E. C., 921
Dominguez, M. A., 843
Donohue, J. H., 1153
Dosani, R. A., 507
Dosoretz, D. E., 507
Drose, J., 1193
Droz, J. P., 3
Duffy, M., 303
Duma, C., 215
Duncan, W., 11, 235
Durr, E. D., 863

Ebersold, M. J., 835
Edmundson, G. K., 561, 1215
Egeli, R., 59
Eifel, P. J., 817
Eisenberg, B., 567
Ellingwood, K. E., 531
Emami, B., 493, 517, 537
Epstein, A. H., 671
Epstein, B. E., 125
Ervin, T. J., 1011
Esche, B., 31
Eschwege, F., 3
Evans, M. D. C., 803, 1207

Fagundes, H. M., 553
Fagundes, L. A., 553
Fagundes, M. A., 553
Fagundes, M. H., 553
Fan, C. J., 101
Fass, D., 437
Fein, D. A., 379, 1029
Feola, J. M., 907
Ferguson, J. A., 835
Finger, P. T., 849
Fischer, D. B., 241, 575
Fischer, E. G., 189
Fischer, J. J., 241, 575
Fish, B. L., 93
Fitzgerald, T. J., 585
Flentje, M., 25
Flickinger, J. C., 215, 397
Flores, A., 1241
Flynn, S. D., 575
Foo, M. L., 403
Foote, R. L., 403, 835, 863
Forastiere, A. A., 465
Ford, C. N., 363
Fornasier, V., 1091
Fowble, B., 567
Fowler, J. F., 178, 363
Fox, K. A., 855
Franzese, F., 259
Freeman, C. R., 197, 803, 871
Friberg, B., 67
Friedman, H. S., 197
Fuks, Z., 171, 437
Fulton, D. S., 207

Gademann, G., 25
Gahbauer, R. A., 1011
Galmarini, D., 507
Galvin, J. M., 697
Garton, G. R., 1153
Gasperin, Jr., P., 83
Gaynon, P. S., 1001
Gaynor, J. J., 259
Geara, F. B., 1173
Geard, C. R., 637
Geido, E., 1165
Georgiou, A., 725
Gerbaulet, A., 1051
Gerber, R. L., 681, 707, 1199
Ghilezan, M., 1073
Giacchetti, S., 3
Giaretti, W., 1165
Gilbert, L., 293
Gildengorin, V., 791
Gillin, M., 1231
Gioioso, D., 303

Girinsky, T., 1051
Gladstone, D. J., 449
Glatstein, E., 293
Goldman, S., 67
Goldsher, D., 231
Goldsmith, B. J., 921
Goodman, P. J., 11
Gospodarowicz, M. K., 11
Gosselin, M., 1207
Gozy, M., 83
Graham, J., 879
Graham, M. V., 517, 707, 1199
Gramaglia, A., 621
Grant, K., 651
Gray, A. C., 101
Greer, B. E., 969
Greiner, R., 17
Griffin, T. W., 235, 499, 969, 1057
Grigsby, P. W., 725, 927, 1253
Grond, A. J. K., 1141
Grossman, H. B., 915
Grossman, N. J., 1001
Gubits, R. M., 637
Gunderson, L. L., 1153
Gustafson, G., 561

Haddad, E., 251
Haffty, B. G., 241, 575
Haie, C., 1051
Halberg, F. E., 75
Hallquist, A., 1085
Halperin, E. C., 197
Halverson, K. J., 517, 1045
Hammond, G. D., 1001
Hanks, G. E., 125, 483, 825
Hanks, M. C., 567
Hannan, S. E., 507
Hao, Y., 1091
Harari, P. M., 363
Hardell, L., 1085
Harlow, C. L., 1193
Harms, W. B., 681
Harrison, B. R., 677
Harrison, L. B., 129, 259, 437, 1241
Haselow, R. E., 1011
Haston, C. K., 651
Hawkins, R., 455
Hazuka, M. B., 273, 689, 731
Healy, J. B., 485
Hendricks, T., 1107
Hendrickson, F. R., 879
Hensley, F., 25
Herbert, D., 531
Hermans, J., 785
Hetelekidis, S., 189, 757
Hilaris, B. S., 1241
Hill, R. P., 651
Hindmarsh, T., 791
Hirschfeld, A., 1231
Hoekstra, F., 785
Hoekstra, H. J., 1141
Hoffman, J., 567
Hogstrom, K. R., 153
Hoh, C., 455
Holupka, E. J., 345
Homer, M. J., 545
Hoogenhout, J., 1107
Hosokawa, M., 1063
Hricak, H., 791, 1255
Hughes, M. N., 1035
Humm, J. L., 345, 643
Hünig, R., 17
Hunt, M. A., 437
Hunter, R. E., 585
Hurkmans, C. W., 717
Hyers, T. M., 677

Illarramendi, J. J., 843

Jaakkimainen, L., 223
Jabour, B., 455
Jacobs, J. R., 1011
Jardines, L., 567
Jewett, M. A., 11
Joel, D. D., 1121
Johns, H., 1101
Johnstone, H. S., 1001
Johnstone, P. A. S., 671, 831
Juillard, G., 455

Kaneko, Y., 1063
Kapp, D. S., 331
Kaskowitz, L., 517
Katin, M. J., 507
Kaufman, D. S., 161
Keegan, M., 825
Keng, P., 613
Kern, M., 585
Kersey, J. H., 1001
Kessler, M. L., 689
Kim, I. S., 613
Kim, R. Y., 1079
Kinashi, Y., 319
Kinsella, T. J., 207, 363, 477, 963
Kinzie, J., 1193
Kiss, R., 83
Kittelson, J. M., 109
Klein, E. E., 419, 429, 681, 927
Kline, R., 1231
Koh, W.-J., 499, 969
Kondziolka, D., 397
Konings, A. W. T., 1141
Kooy, H. M., 215
Krall, J. M., 235, 499
Krischer, J. P., 197
Krishnasamy, S., 137
Krüger, M., 17
Kucik, N. A., 591
Kumar, M. U., 1069
Kun, L. E., 197
Kupelian, P. A., 817
Kurtz, J. M., 17, 59, 177
Kurup, R. G., 101
Kutcher, G. J., 437
Kuten, A., 231, 1181

Lakier, R., 1181
Lanciano, R. M., 825, 987
Laperriere, N. J., 223
Laramore, G. E., 235, 499, 1011
Lariscy, C., 531
Lavey, R. S., 1147
Lawrence, T. S., 659, 689
Le Bourgeois, J.-P., 251, 1073
Lee, M.-S., 879
Lee, S.-T., 1185
Leibel, S. A., 171, 437
Leigh, B. R., 855
Leonard, C., 1193
Leopold, K. A., 1245
Le Pechoux, C., 251
Lester, S., 207
Leung, W.-M., 1185
LeVay, J., 1091
Leviov, M., 231
Lewis, J. E., 835
Leybovich, L. B., 101
Lichter, A. S., 273, 689, 731, 915
Lin, F.-J., 1185
Lingareddy, V., 1159
Little, J. B., 319
Liu, H. B., 1121
Llamas, K. J., 1035
Lo, E. H., 353
Lo, Y.-C., 309
Loeffler, J. S., 215
Löfroth, P.-O., 1085
Lopez, R., 843
Louis, O., 945
Low, D., 1199
Lu, D., 849
Luk, K., 109
Lunsford, L. D., 215, 397
Lütolf, U. M., 17
Lutz, S. T., 273

Mack, C. F., 109, 855
Macklis, R. M., 643
Maitz, A., 397
Makar, M. S., 1121
Maor, M. H., 235, 499
Marchant, D. J., 545
Marcus, Jr., R. B., 1029
Margarino, G., 1165
Marks, G., 765, 773, 779, 1159
Marsh, L., 731
Marshall, S. J., 677
Martel, M. K., 273, 689, 731
Marti, M.-C., 59
Martin, E., 825
Martin, J. K., 1153
Martin, L., 537, 1231
Martin, M., 251
Martinez, A. A., 561, 1215, 1241
Martinez, E., 843
Maruyama, Y., 907, 981
Masoni, L., 779
Mastras, D., 969
Matter, R. C., 561
Maybaum, J., 659
Mazeron, J.-J., 251, 1073
McBride, W. H., 309
McCullough, E. C., 403
McDonald, R. D., 677
McDonald, S., 613
McGinn, C. J., 363
McIlrath, D. C., 1153
McLaughlin, P. W., 915
McMahon, D. J., 47
Mehta, M. P., 477, 963, 1241
Meigooni, A. S., 927
Meistrich, M. L., 1131
Mellenberg, D. E., 953
Mendenhall, W. M., 379, 1017, 1029
Menke, M., 25
Meredith, R. F., 1079
Merino, M. J., 293, 671
Mestas, G., 507
Metke, M. P., 507
Micca, P. L., 1121
Michalski, J. M., 707, 1199
Mijnheer, B. J., 419
Milani, F., 621
Miller, T. P., 855
Million, R. R., 379, 1017, 1029
Milosevic, M., 223
Milstein, D., 231
Miralbell, R., 17, 59
Mirimanoff, R. O., 17, 885
Mohiuddin, M., 765, 773, 779, 1159
Moldofsky, P. J., 178
Moni, J. V., 129
Morita, A., 835
Morrison, W. H., 153
Moulder, J. E., 93
Muhs, A., 613
Munoz, L., 197
Munro, A. J., 11
Myerson, R., 1045

Nag, S., 1241
Nagasawa, H., 319
Nagorney, D. M., 1153
Nakano, T., 811
Naunheim, K. S., 677
Nawrocky, M. M., 1121
Nelson, B. E., 585
Newcomb, C. H., 651
Nguyen, T. D., 17
Nishimura, Y., 605
Nori, D., 1241
Normolle, D. P., 659
Norton, L., 1193

O'Donoghue, J. A., 323
O'Fallon, W. M., 835
Ohar, J. A., 677
Oka, K., 811
Oldhoff, J., 1141
Oleson, J. R., 1245
Olsen, K. D., 835
Oppelaar, H., 665
Orecchia, R., 1165
O'Sullivan, B., 1091
Oswald, M. J., 817
Oya, N., 1113

Page, R. L., 1245
Pajak, T. F., 493, 537
Palayoor, S., 643
Palazzi, M., 621
Pao, L. K., 47
Papac, R., 241
Parker, R., 455
Parsons, J. T., 379, 1017, 1029
Pasteels, J.-L., 83
Pauwels, O., 83
Payne, D., 223
Pederson, J., 493
Pelizzari, C. A., 137
Pendlebury, S. C., 959
Perez, C. A., 707, 725, 1045

Petereit, D. G., 963
Peters, L. J., 499, 1173
Peynegre, R., 251
Phillips, T. L., 75, 109, 791
Philpott, G., 1045
Phlips, P., 525
Piccinno, R., 385
Pickett, B., 921
Piedbois, P., 251
Piephoff, J. V., 1199
Pierce, L. J., 293, 671
Pierquin, B., 251, 1073
Pipard, G., 59
Pisansky, T. M., 403
Pla, C., 803, 1225
Pla, M., 1207, 1225
Podgorsak, E. B., 803, 1207, 1225
Pohar, S., 1073
Pollack, A., 1131
Popowski, Y., 59
Porter, A., 1241
Potish, R. A., 975
Poulsen, M., 267
Purdy, J. A., 429, 681
Pyle, G. M., 363

Quast, L. M., 835
Quirt, I., 1091
Quivey, J. M., 791

Raju, P. I., 677
Rakinic, J., 1159
Raleigh, J. A., 891
Raming, M., 785
Ramsay, J., 485
Randrianarivello, H., 1051
Raoul, Y., 3
Rashid, M., 507
Ravasi, G., 621
Reale, F. R., 585
Recht, A., 749
Reddy, S., 879
Rege, S., 455
Renna, M. A., 707
Rey, A., 1051
Rice, R. K., 419
Richmond, H., 11
Richter, M. P., 235
Ries, G., 17
Rizzo, N. R., 1215
Roach, III, M., 493, 921
Robertson, J. M., 689
Robertson, S., 31
Roche, B., 1051
Rockwell, S., 241
Rocmans, P., 525
Rojas, A. M., 1101
Roman, T. N., 803, 871
Rosato, E. F., 567
Rose, P. G., 585
Rosenman, J. G., 145
Rosenow, U. F., 177
Rosenthal, S. A., 921
Rossman, K. J., 1241
Rotman, M., 117
Roy, T., 677
Rubenstein, J. H., 507
Rubin, P., 1, 187, 491, 613, 763, 999
Rubin, S., 137
Ruff, P., 1181
Rush, C., 517, 1045
Russell, A. H., 117, 493
Russell, K. J., 969
Russell, P., 1101
Ryu, J. K., 921

Sack, H., 627
Safaii, H., 545
Salenius, S. A., 507
Salter, M. M., 1079
Samulski, T. V., 1245
Sandler, H. M., 915
Sanford, R. A., 197
Sanguineti, G., 1165
Sarin, P., 879
Sarin, R., 285
Saroja, K. R., 235
Sartorelli, A., 241
Sasai, K., 1113
Sasaki, C. T., 241
Sather, H. N., 1001
Sause, W. T., 747
Sawyer, P. J., 707
Schiff, P. B., 47, 637
Schmid, C., 545
Schmidt-Ullrich, R. K., 545, 757
Schneider, L., 189
Schoenthaler, R., 75
Schoeppel, S. L., 953
Schuller, D. E., 1011
Schultheiss, T. E., 125
Schultz, D. J., 567
Schwade, J. G., 1011
Scott, C. B., 1011
Scott, R. M., 189
Selke, P., 803
Senan, S., 483
Seymour, R., 871
Sharma, V., 285
Shaw, E. G., 403, 1231
Shenouda, G., 1207
Shibamoto, Y., 1113
Shimm, D. S., 109
Shin, K. H., 537
Shipley, W. U., 161, 985
Shiu, A. S., 153
Shrivastava, S. K., 285
Siegel, A. D., 507
Simon, J.-M., 251
Simons, J., 575
Simpson, J. R., 1045
Simpson, W. J., 223
Sindelar, W. F., 831
Sinzig, M., 17
Slatkin, D. N., 1121
Slessinger, E. D., 681
Smith, J. W., 1079
Smith, J., 613
Smith, R. M., 697
Smith, T. J., 545
Sneed, P. K., 109
Sobel, S., 613
Soffen, E. M., 921
Solin, L. J., 567
Son, Y. H., 241
Song, C. W., 899
Soper, J., 1245
Souhami, L., 803, 871, 1225, 1231
Speiser, B. L., 1241
Spencer, D., 1181
Spencer, S. A., 1079
Stanimir, G. W., 871
Starkschall, G., 153
Stauffer, P. R., 109
Stavenuiter, M., 665
Stea, B., 109
Steeves, R., 109
Stehman, F. B., 1255
Stein, M. E., 231, 1181
Steinberg, S. M., 293
Steinherz, P. G., 1001
Stelzer, K. J., 969, 1057
Stern, J. L., 791
Stern, R. L., 921
Stewart, F. A., 665
Stitt, J. A., 1241
Stohman, F. B., 0000
Storme, G., 945
Strawderman, M., 273
Stringer, S. P., 379, 1017
Strunski, W., 251
Sturgeon, J. F., 11
Stuschke, M., 627
Sugiyama, T., 1113
Suit, H. D., 303
Supe, S. S., 1069
Suzuki, K., 1063
Svensson, C., 67
Svensson, G. K., 345
Swamy, K., 1069
Sweeney, S., 643
Swift, P. S., 109
Syed, A. M. N., 1241
Symon, J. R., 145

Taghian, A., 303
Tak, W. K., 585
Takamura, A., 1063
Tang, S. G., 1185
Tao, M. L., 189
Tarbell, N. J., 189, 345, 757
Taylor, J. M. G., 309
Taylor, M. E., 1045
Teahan, M., 1215
Tejedor, M., 843
Ten Haken, R. K., 273, 689
Terry, N. H. A., 1131
Thomas, D. G. T., 471
Thomas, G. M., 11, 992
Thöni, A., 17
Thrall, D. E., 891
Tishler, R. B., 215
Tiver, K. W., 371
Tomberlin, J. K., 1245
Tomita, M., 1063
Tornos, C., 817
Trigg, M. E., 1001
Tripcony, L. B., 1035
Trovò, M. G., 484
Trudeau, M., 871
Tucker, G., 1045
Tung, S. S., 153
Turlington, E. G., 863
Turner, S. L., 267, 371
Turner, S. S., 117
Turrisi, III, A. T., 273, 689
Twiggs, L. B., 975

Uckun, F. M., 899
Urano, M., 605
Urtasun, R. C., 207

Valerdi, J. J., 843
Valicenti, R. K., 591, 1199
Van den Heuvel, F., 945
van der Giessen, P.-H., 717
Vanderhoeft, P., 525
Van Der Merwe, D. G., 391
Van Dyk, J., 651
van Herk, M., 449
Van Houtte, P., 83, 525
van Zandwijk, N., 665
Varia, M., 0000
Verellen, D., 945
Vermeij, J., 1141
Vicini, F. A., 561, 1215
Vijayakumar, S., 137
Vikram, B., 1241
Vitale, V., 1165
Vokes, E. E., 481

Waldron, J. N., 223
Wallenberg, J., 613
Wannenmacher, M., 25
Warde, P. R., 11
Warr, D., 1091
Wasserman, T. H., 117, 207, 591
Wazer, D. E., 545, 757
Weichselbaum, R. R., 481
Weiss, M. C., 567
Wheeler, R., 1011
Wheldon, T. E., 323
White, J., 561
White, R. A., 1131
Wibault, P., 3
Wierzbicki, J., 907
Wiggenraad, R., 785
Wike, J. L., 1173
Williamson, J. F., 725, 927
Withers, H. R., 309
Wobbes, T., 1107
Wolf, G. T., 731
Wong, C. S., 223
Wong, J. W., 707, 1199

Yan, D., 707, 1199
Yang, J. C., 671
Yeh, I-T., 567
Yelland, M. E., 1035
Yordan, E., 879
Yuo, H.-S., 921

Zagars, G. K., 39
Zaleski, V., 31
Zanelli, G. D., 484
Zelefsky, M. J., 171
Zeman, E. M., 891
Zentner, P. G., 47
Ziegler, A. M., 575
Zietman, A. L., 161
Zink, S., 499

SUBJECT INDEX

Volume 27, 1993

A

Abutment dosimetry, 153
Accelerated repopulation, 975
Acceleration, 885, 1101
ACE inhibitors, 93
Acquired immune deficiency syndrome, 1057
Activity, 455
Acute lymphoblastic leukemia, 899
Adenocarcinoma, 75
Adjunctive therapy, 765
Adjuvant therapy, 671
Adverse effects, 1029
African Kaposi's sarcoma, 1181
Afterloading, 1241
Age, 1045
Air cavity, 419
ALL, 1001
Anal cancer, 59, 67
Analysis
  Computer, 651
  Digital cell image, 83
  Multivariate, 1017
Apoptosis, 643
Arteriovenous malformation, 353
Assessment of risk, 717
Astrocytoma, 637
Asymmetric collimators, 681

B

B cell lymphoma, 395
Beam's eye view display, 145, 273
Betaseron®, 613
Bile duct, 75
Biliary, 75
Biomathematical model, 353
Biophysical treatment planning, 25
Biopsy
  Drill, 811
  Postradiotherapy, 31
Bioreductive drugs, 665
Bladder carcinoma, 161
Bleomycin, 67
Blood
  Cerebral flow, 353
  Transfusions, 1051
Bone marrow, 907
  Rescue, 323
  Transplant, 93
  Transplantation, 899
Boost(s)
  Breast, 561
  Planning, 1193
Boron neutron capture therapy, 1121
Brachytherapy, 75, 251, 259, 585, 725, 1241
  High dose rate, 803, 871
  Intraluminal, 1069
  Intranasal, 1073
  Planning, 129
Brain
  Irradiation, 1225
  Stem tumors, 197
  Tumor, 637
Breast, 671
  Boosts, 561
  Cancer, 293, 561, 567, 1045, 1193
  Conservation therapy, 545
  Conserving surgery, 553
  Early cancer, 285
  Invasive carcinoma, 545
  Recurrence, 1045
  Tumors, 455
Breathing rate, 651
Bromodeoxyuridine, 1165

C

Cancer, 75, 1241
  Anal, 59, 67
  Breast, 293, 561, 567, 1045, 1193
  Cervical, 811, 1051
  Cervix, 959, 975
  Distal rectal, 779
  Early breast, 285
  Endobronchial obstructing lung, 531
  Esophageal, 1069
  Head and neck, 241, 363, 465, 731, 1011
  Lung, 525
  Nasopharynx, 437
  Non-small cell lung, 273, 499, 517, 613, 621
  Pancreatic, 831
  Prostate, 31, 39, 47, 125, 1215
  Rectal, 765, 773, 885, 1159
  Thyroid, 1085
  Unresectable pancreatic, 1153
  Vulvar, 963
Captopril, 93
Carbogen, 1101
Carcinoma
  Bladder, 161
  Cervical, 791
  Cervix, 803, 871
  Endometrial, 585, 817
  Esophageal, 1063
  Esophagus, 843
  In situ, 379
  Invasive breast, 545
  Ovarian, 879, 1245
  Rectal, 785
  Squamous cell, 251, 267
CCI-103F, 891
Cell(s)
  G18, 637
  Human tumor, 319
  Kinetics, 1165
  Leukemic progenitor, 899
  Non-small, 507
  Non-small lung cancer, 273, 499, 517, 613, 621
  Proliferative and quiescent, 891
C-erb B-2 amplification, 293
Cerebral blood flow, 353
Cervical
  Cancer, 811, 1051
  Carcinoma, 791
Cervix, 1241
  Cancer, 959, 975
  Carcinoma, 803, 871
Charged particles, 75
Chemo-radiotherapy, 59
  Neoadjuvant, 621
Chemotherapy, 161, 371
  Intraperitoneal, 1245
  Neoadjuvant, 843
Childhood brain tumors, 189
Chlorodeoxyuridine, 1131
Cholangiocarcinomas, 75
Chorionic gonadotropin, 17
Cisplatin, 465, 871, 1245
Cis-platinum, 975
CNS prophylaxis, 1001
Collimation, 681
  Multileaf, 697
Colonic anastomosis, 1107
Combined
  Electron-photon treatment, 153
  Treatment, 1091
Complications, 117, 215, 285, 803, 871, 1069
Compression
  Epidural spinal cord, 1073
  Spinal cord, 231
Computed tomography treatment planning, 273
Computer analysis, 651
Concurrent radiochemotherapy, 871
Conformal
  Radiotherapy, 47
  Therapy, 921
  Treatment, 697
  Treatment planning, 437
Conservative surgery and radiation therapy, 575
Control, 455
  Local, 331
Cosmesis, 285, 553
Cranial nerves, 215
Craniopharyngioma, 189
CT scan, 525
Cutaneous B cell lymphoma, 385

D

Damage
  DNA, 659
  Radiation, 659
Definitive radiotherapy, 285
Depth
  Femoral vessel, 969
  Groin node, 969
Differentiation of tumor, 627
Diffuse microcalcifications, 567
Digital cell image analysis, 83
Digitally reconstructed
  Fluoroscopy, 145
  Radiographs, 145
Disease
  Gross multicentric, 567
  Hodgkin's, 855
  Rendu-Osler, 1073
Display
  Beam's eye view, 145, 273
  Three-dimensional, 145
Distal rectal cancer, 779
DNA, 1131
  Damage, 659
  Double strand breaks, 319, 659
Dose(s)
  Dependence, 1063

Gap, 345
Gonadal, 717
Low radiation, 1113
Optimization, 697
Photon distribution, 419
Radiation boost, 545
Response, 531, 651, 773
Surface, 429
Dose rate
High, 927, 1241
Low, 907
Dose-volume histograms, 689
Dosimetry, 429, 681
Abutment, 153
Interface, 419
Double strand breaks in DNA, 659
Drill biopsy, 811
Drug(s)
Bioreductive, 665
Therapy, 1091

E

Early breast cancer, 285
ED50, 907
Effects
Adverse, 1029
Low-dose-rate, 643
Radiation, 1029
Radiation volume, 537
egr-1, 637
Electron
Beam therapy, 1207
Total skin therapy, 391
Treatment, 953
Electronic
Equilibrium, 419
Portal imaging device, 449
Electrophoresis of pulsed field gel, 659
Enalapril, 93
Endemic, 1181
Endobronchial, 1241
Obstructing lung cancer, 531
Endometrial carcinoma, 585, 817
Endometrium, 1241
Epidural
Metastases, 231
Spinal cord compression, 1073
Epistaxis, 1073
Error(s)
Set-up, 137, 345
Treatment, 707
Erythropoietin, 1147
Esophageal
Cancer, 1069
Carcinoma, 1063
Esophagus carcinoma, 843
Esthesioneuroblastoma, 835
Etanidazole, 1113
Evaluating image quality, 945
Eye, 849

F

Factors
Prognostic, 11, 47, 331, 591, 791, 1091
Risk, 1085
Fast neutron radiotherapy, 235
Femoral vessel depth, 969
Ferromagnetic, 109
Fibroblast, 1173
FIGO staging, 791
Films
Portal, 921
Verification, 921
Flow cytometry, 1131, 1165
Foot reaction, 605
fos, 637
Fractionated
Radiotherapy, 605
Stereotactic radiotherapy, 1225
Fractionation, 309, 363, 1101

G

Gamma knife, 1231
Gap dose, 345
Gastric lymphoma, 591
Gastrointestinal, 907
G18 cell, 637
Gene
Expression, 637
Immediate early, 637
Genetic fingerprinting, 575
Germinoma, 1185
Gliosarcoma, 9L, 1121
Gonadal dose, 717
Groin node depth, 969
Gross multicentric disease, 567
Guidelines, 1241
Gynecology, 725

H

HDR, 1215
Head and neck, 455
Cancer, 241, 363, 465, 731, 1011
Tumors, 1165
Healing of wound, 1107
Helium, 75
Hemoglobin, 1147
Levels, 1051
Hepatitis, 117
Heterogeneity, 429
Intratumoral, 303
Tissue, 419
Heterotopic bone, 863
High
Linear energy transfer, 1121
Response rate, 1181
High dose
Rate, 927, 1241
Rate brachytherapy, 803, 871
Preoperative radiation therapy, 779
Histology, 811
Histopathological margins, 545
Hodgkin's disease, 855
Human tumor cells, 319
Hyperfractionated
Radiation therapy, 537
Radiotherapy, 197
Hyperfractionation, 885
Hyperthermia, 109, 331, 605, 1245
Hypopharyngeal neoplasms, 1017
Hypoxic cell radiosensitizer, 1113
Hypoxic toxins, 665

I

Image
Enhancement, 945
On-line verification, 707
Registration, 137
Imaging
Electronic portal device, 449
On-line, 137
On-line portal, 945, 1199
Immediate early gene, 637
Immobilization devices, 921
Immunocytochemistry, 891
Immunophenotype, 899
Implant(s), 725, 1215
Interstitial, 561
Lung, 531
Independent jaws, 681
Inguinofemoral
Dissection, 963
Irradiation, 963
Inoperable, 817
In situ carcinoma, 379
Interface dosimetry, 419
Interruptions, 493
Interstitial
Hyperthermia, 101
Implant, 561
Photodynamic therapy, 665
Thermoradiotherapy, 109
Intracavitary, 725
Radiation, 825
Intracranial hemorrhage, 353
Intraluminal brachytherapy, 1069
Intranasal brachytherapy, 1073
Intraoperative
Radiation therapy, 1153
Radiotherapy, 831, 1063, 1141
Intraperitoneal chemotherapy, 1245
Intratumoral heterogeneity, 303
Invasive breast carcinoma, 545
Inverse problem, 697
In vitro, 83
Sensitivity, 303
In vivo study, 1113
Iodine-125, 561, 849
Iododeoxyuridine, 1131
Iridium 192, 251
Irradiation, 725, 1107
And renal tolerance, 25
Brain, 1225
Inguinofemoral, 963
Large field, 391
Preoperative external beam, 1153
Small beam, 1225
Techniques, 1207
Total body, 323, 449
Total scalp, 153
Isoeffect, 309

J

jun, 637

K

Kaposi's sarcoma, 1057
African, 1181
KU-2285, 1113

L

Large field irradiation, 391
Laryngeal neoplasms, 379
Leukemic progenitor cells, 899
Linear
Accelerator, 1231
Quadratic, 363

Liver, 117, 1141
Local
Control, 331
Excision, 553
Recurrence, 575
Local tumor control, 791
Rates, 545
Locally advanced, 843
Longterm results, 843
Low dose rate, 907
Effects, 643
Low radiation doses, 1113
Lumpectomy, 1193
Lung, 1241
Implants, 531
Neoplasms, 507
Lung cancer, 525
Endobronchial obstructing, 531
Non-small cell, 273, 499, 517, 613, 621
Lymphangiogram, 959
Lymphocyte, 1173
Lymphoma
B cell, 385, 395
Cutaneous B cell, 395
Gastric, 591
Malignant, 643
Recurrent Hodgkin's, 1207

M

Magnetic resonance imaging (MRI), 791
Malignancy(ies)
Salivary gland, 235
Second, 3, 75
Malignant
Glioma(s), 207, 303
Lymphoma, 643
Tumors, 1073
Margins
Histopathological, 545
Positive surgical, 1011
Mastectomy, 567, 671
Medulloblastoma, 345
Melanoma, 849
Metastases, 117
Epidural, 231
Microwave antennas, 101
Mitomycin C, 241
Mixed radiation, 907
Morphonuclear modifications, 83
Multicellular spheroids, 627
Multicenter randomized clinical trial, 499
Multileaf collimation, 697
Multivariate analysis, 1017
Murine fibrosarcoma, 605
Muscle phantom, 101
Mycosis fungoides, 391, 953

N

Nasal vestibule, 267
Nasopharyngeal neoplasms, 371
Nasopharynx cancer, 437
Neoadjuvant
Chemo-radiotherapy, 621
Chemotherapy, 843
Neon, 75
Neoplasm(s), 75, 1029
Hypopharyngeal, 1017
Laryngeal, 379
Lung, 507
Nasopharyngeal, 371
Prostate, 921
Prostatic, 915
Nephropathy, 93
Neuropathy, 215
Neutron radiotherapy, 499
Nicotinamide, 1101
9L gliosarcoma, 1121
Nomographs, 129
Non-destructive testing, 927
Non-small cell, 507
Lung cancer, 273, 499, 517, 613, 621
Nongerminoma, 1185
Normal tissue, 1173
Complication probability (NTCP), 25, 689
Radiation, 403
NSCCL, 493

O

On-line
Image verification, 707
Imaging, 137
Portal imaging, 945, 1199
Ovarian carcinoma, 879, 1245
Overall
Time, 363, 1101
Treatment time, 1051

P

Palladium-103 (^{103}Pd), 849
Seeds, 129
Pancreatic cancer, 831
Unresectable, 1153
Paravertebral mass, 1073
Parotid sparing, 731
Patient
Outcome, 791
Repositioning, 137
Patterns of failure, 831
PCNA, 891
Peripheral dose radiation, 403
Photon
Dose distribution, 419
Radiotherapy, 499
Pineal tumors, 1185
Pituitary adenomas, 1035
Planning
Boost, 1193
Brachytherapy, 129
Treatment, 915, 1215
Plaque, 849
Portal
Films, 921
On-line imaging, 1199
Positive surgical margins, 1011
Positron emission tomography, 455
Postoperative radiotherapy, 525, 785, 885
Postradiotherapy biopsy, 31
Potential doubling time, 1131, 1165
Precision radiotherapy, 137, 945
Preoperative
External beam irradiation, 1153
Radiation therapy, 773
Preservation of sphincter, 59
Pretreatment temperature, 331
Probability of normal tissue complication, 689
Prognosis, 811
Prognostic factors, 11, 47, 331, 591, 791, 1091
Proliferative and quiescent cells, 891
Prophylactic groin radiation, 969
Prospective dose escalation studies, 689
Prostate
Cancer, 31, 39, 47, 125, 1215
Neoplasm, 921
Specific antigen, 39, 125
Prostatic neoplasms, 915
Protein over-expression, 293
PSA, 47
PSAD, 47
Pulsed field gel electrophoresis, 659
Pyrimidine analogues, 207

Q

Quadrantectomy, 553
Quality
Assurance, 397, 449, 921, 1231
Evaluating image, 945
Quetelet index, 969

R

Radiation, 93, 109, 161, 637, 811
Boost dose, 545
Damage, 659
Effects, 1029
Injury, 309
Intracavitary, 825
Mixed, 907
Normal tissue, 403
Peripheral dose, 403
Prophylactic groin, 969
Pulmonary toxicity, 537
Resistance, 899
Safety, 927
Scatter dose, 403
Secondary, 403
Shielding, 927
Treatment, 1051
Volume effects, 537
Radiation therapy, 3, 17, 39, 189, 241, 259, 267, 273, 345, 493, 585, 717, 791, 831, 835, 855, 863, 1045, 1057, 1085, 1147, 1199
Conservative surgery and, 575
High dose preoperative, 779
Hyperfrationated, 537
Intraoperative, 1153
Preoperative, 773
Salvage whole abdomen, 879
Radiobiology, 643
Radioimmunotherapy, 643
Radioresponsiveness, 627
Radiosensitivity, 319, 323, 627, 1173, 1181
Radiosensitization, 613
Radiosensitizer(s), 207
Hypoxic cell, 1113
Radiosurgery, 215, 397, 1225, 1231
Stereotactic, 353
Radiotherapy, 31, 67, 75, 83, 117, 197, 223, 231, 251, 363, 371, 379, 385, 465, 507, 517, 613, 671, 803, 843, 871, 915, 921, 1011, 1017, 1029, 1035, 1073, 1091, 1181, 1185
Alone, 817
Conformal, 47
Definitive, 285
Fast neutron, 235
Fractionated, 605
Fractionated stereotactic, 1225
Hyperfractionated, 197
Intraoperative, 831, 1063, 1141
Neutron, 499
Photon, 499

Postoperative, 525, 785, 885
Precision, 137, 945
Targeted, 323
Rat, 1107, 1121
Rate(s)
Breathing, 651
High response, 1181
Local tumor control, 545
Reaction(s), 1173
Foot, 605
Recombinant human interferon-b, 613
Recovery capacity, 627
Rectal
Cancer, 765, 773, 885, 1159
Carcinoma, 785
Distal cancer, 779
Recurrence
Breast, 1045
Local, 575
Recurrent, 855
Hodgkin's lymphoma, 1207
Reirradiation, 1159
Relative biological effectiveness, 1121
Remote afterloading intracavitary therapy, 803
Remote-controlled, 1241
Renal tolerance of irradiation, 25
Rendu-Osler disease, 1073
Resistance to radiation, 899
Response, 455
Dose, 531, 651, 773
High rate, 1181
Restriction enzymes, 319
Results, 223
Long-term, 843
Risk
Assessment, 717
Factors, 1085
RTOG, 493

S

Safety of radiation, 927
Salivary gland(s), 731
Malignancies, 235
Salvage whole abdomen radiation therapy, 879
Sarcoma(s), 259
African Kaposi's, 1181
Kaposi's, 1057
Soft tissue, 671, 1091
Scalp, 953
Scatter dose radiation, 403
Second malignancies, 3, 75
Secondary radiation, 403
Seminoma, 17
Stage I, 11
Stage I testis, 3
Sensitizers, 1101
Set-up error, 137, 345
Sexual function, 825
Skin, 395
Therapy, 391
Small beam irradiation, 1225
Soft
Palate, 251
Tissue sarcoma(s), 671, 1091
Sphincter preservation, 59
Surgery, 779
Spinal cord, 309, 1029
Compression, 231
Shield, 1207
Spinal ependymoma, 223
Squamous cell carcinoma, 251, 267
SR 4233, 665
Stage I
Seminoma, 11
Testis seminoma, 3
Stage III, 621
Stereotactic, 1231
Frame, 1225
Radiosurgery, 353
Stereotaxic, 397
Study(ies)
In vivo, 1113
Prospective dose escalation, 689
Surveillance, 11
Surface
Dose, 429
Heating, 101
Surgery, 189, 267, 585, 831, 1091
Breast conserving, 553
Sphincter preservation, 779
Surveillance study, 11
Surviving fraction at 2 Gy, 303
Syndrome, 907
Acquired immune deficiency, 1057

T

Targeted radiotherapy, 323
Taxol, 637
Temperature
Differential, 331
Pretreatment, 331
Temporomandibular joint, 863
TER, 605
Tetradecanoyl phorbol acetate, 637
Therapeutic gain, 605
Therapy, 1241
Adjunctive, 765
Adjuvant, 671
Boron neutron capture, 1121
Breast conservation, 545
Conformal, 921
Conservative surgery and radiation, 575
Drug, 1091
Electron beam, 1207
High dose preoperative radiation, 779
Hyperfractionated radiation, 537
Interstitial photodynamic, 665
Intraoperative radiation, 1153
Preoperative radiation, 773
Radiation, 3, 17, 39, 189, 241, 267, 273, 493, 585, 717, 791, 831, 835, 863, 1045, 1057, 1085, 1147, 1199
Remote afterloading intracavitary, 803
Salvage whole abdomen radiation, 879
Skin, 391
Total skin electron, 391
Thermal parameters, 331
Three-dimensional (3-D)
Compensation, 697
Design, 145
Display, 145
Treatment planning, 145, 153, 689, 731
Thyroid cancer, 1085
TIS8, 637
Tissue
Heterogeneity, 419
Normal, 1173
Tolerance, 1141
Tonsillar region, 251
Total
Body irradiation, 323, 449
Scalp irradiation, 153
Skin electron therapy, 391
Tracheal ulcer, 1063
Transplant of bone marrow, 93
Transplantation of bone marrow, 899
Transrectal ultrasound, 31
Transurethral resection, 161
Treatment, 3, 197
Combined, 1091
Combined electron-photon, 153
Conformal, 697
Electron, 953
Errors, 707
Overall time, 1051
Plan recalculation, 707
Radiation, 1051
Reproducibility, 437
Treatment planning, 915, 1215
Biophysical, 25
Computed tomography, 273
Conformal, 437
Three-dimensional, 145, 153, 689, 731
Treatment verification, 921
Tools, 1199
Tumor(s), 1101
Brain, 637
Brain stem, 197
Breast, 455
Bulk, 591
Differentiation, 627
Head and neck, 1165
Hypoxia, 891
Local control, 791
Malignant, 1073
Pineal, 1185
2-[F-18]fluoro-2-deoxy-D-glucose, 455

U

Ultrasound, 651, 1193
Guidance, 1215
Transrectal, 31
Unresectable pancreatic cancer, 1153

V

Vaginal stenosis, 825
Variable distance, 101
Verification
Films, 921
Treatment, 921
Volume
Radiation effects, 537
Rendering, 145
Vulvar cancer, 963

W

Wound healing, 1107

X

Xerostomia, 731

Y

Yttrium-90, 643

Z

zif268, 637